

OPERATION

FOR THE

RADICAL CURE

OF

CONGENITAL INGUINAL HERNIA
IN THE CHILD.

BY

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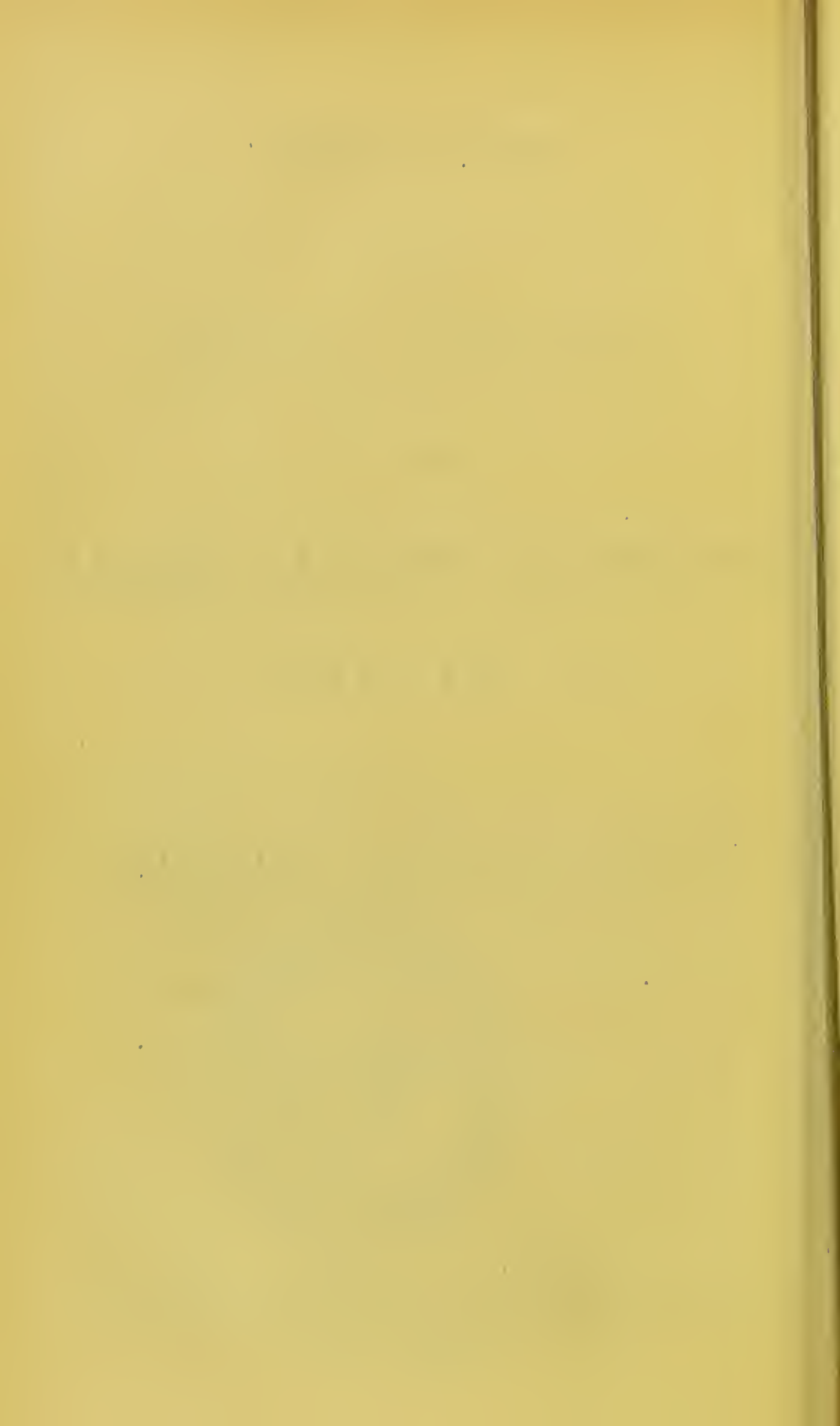
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WILLIAM MACKENZIE:

43, 45 HOWARD STREET, GLASGOW; AND 69 LUDGATE HILL, LONDON

1879.



OPERATION

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PROFESSOR JOHN WOOD's operation for the radical cure of inguinal hernia in the adult is, on the whole, so successful and so free from danger, that I am surprised so few of the many hundreds affected with hernia in every community seek the relief it affords. I presume it is because there must always be some hesitation in accepting the present risk, however small, which accompanies an operation; and a hope that the much greater danger of strangulation may never occur. But in the case of young boys the risk arising from an operation is much less. I think it has been shown that the peritoneal cavity, especially under antiseptic precautions, may be opened with impunity. But even this risk is, in Mr. Wood's plan, not encountered; and it seems to me strange that boys who have a congenital hernia which cannot be kept permanently reduced by any apparatus—a state of matters which every hospital surgeon sees repeatedly—should be allowed to grow up with a deformity which prevents them being useful and happy members of society, and debars them from a great many employments.

I confess, however, that I have been disappointed with the results of my attempts to cure congenital hernia in

children by Mr. Wood's operation with pins used subcutaneously. Either I did not succeed in pushing them through the anatomical structures I intended, which is so easy to do in the adult with the strong curved needle, or I failed to lock them and twist them, as it is necessary to do; but, from whatever cause, in the two cases I operated on the result was unsatisfactory. The hernia came down as soon as the pins were taken out.

I determined, therefore, to perform an operation consisting of opening the sac and obliterating the canal by the introduction of strong sutures. The steps followed will be best understood by the report of a case which formed the subject of a clinical lecture.

Robert Inglis, aged sixteen months, was the subject of congenital inguinal hernia, which was observed shortly after his birth. It was small when first noticed, but soon increased in size; and it had grown with his growth. It was on January 9th, 1879, about the size of a turkey's egg, and distended the left side of the scrotum. It could be reduced with ease; but it as easily slipped down, and no apparatus or bandage could retain it in its place. Trusses had been tried at various times; but no sooner did the child move, than the hernia came down. On returning it into the abdomen, the finger was readily pushed through the inguinal opening; but even then, unless pushed far up, the bowel slipped down alongside of it.

Before performing any operation, I accustomed the little patient to the pressure of a bandage. I returned the bowel, and applied a large thick pad, which was bandaged very firmly with a figure-of-eight bandage round the groin. This retained the hernia in its place for some hours; but the movements of the child and repeated fits of crying brought it down usually within twenty-four hours.

On January 25th, 1879, I performed a radical operation as follows. The patient having been put under the influence of chloroform, the rupture was returned and kept up by the finger of an assistant. A longitudinal incision was made along the whole length of the sac, from opposite the internal ring to the bottom of the scrotum. This divided all

the textures down to the peritoneal sac, which, as usual, had been thickened by the presence and movements of the hernia. With the handle of the knife and a few touches of its point, I separated the sac from its superficial structures, leaving the posterior part lying over the cord, which was seen behind. I now divided the sac into two halves by a transverse cut, except at the back, where it was adhering to the cord. One half was folded down over the testicle, so as to form a sort of *tunica vaginalis*. The upper half was rolled into a sort of ball or plug, which I pushed into the internal abdominal ring and had it kept there by the assistant. I now approximated the walls of the inguinal canal much in the same way as in the wire-operation for the radical cure of hernia in the adult. Having previously pushed aside and slightly dissected the superficial structures from off the abdominal aponeurosis, the relations of the rings and the canal could be felt and in great part seen. I took a strong *nævus*-needle, and pushed it through the external pillar of the canal at a spot opposite the internal ring; then, guiding it with the point of my left forefinger lying in the internal ring, I made it lift up the lower border of the internal oblique muscle, and emerge through the internal pillar of the external aponeurosis about half an inch above its lower edge. A strong waxed silk thread was now passed through the hole at the point of the needle, which was then withdrawn, pulling the thread with it. The thread was then tightly tied, including the structures through which the needle had been passed, and so fixing into the internal ring the rolled-up bit of the sac, care being taken that the external raw surface of the sac should be turned outwards toward the integument which was to cover it. A little below the first stitch, a second was introduced in the same direction, care being taken to avoid the structures of the cord which lay at the bottom of the wound. The edges of the external ring were now drawn together tightly above the cord by a strong silver wire; this was made to take a very strong hold, by passing the needle first through the external pillar, across the ring, and through the internal pillar. In making the internal puncture, I passed the point of the needle so far towards the *linea alba* as to make it pierce from below the tendon of

insertion of the rectus muscle, so as to give a firm hold. When the wire was drawn through with the needle, it was elamped, so as to squeeze together the boundaries of the external ring; and it was retained in that position by a little rod of silver with a hole at its point, through which the two ends of the wire were passed; and, having been drawn tight, they were fixed by a turn round the rod. The silk threads were clipped short; and the wires, with the little clamping rod to which they were fixed, were allowed to hang out at the bottom of the wound. The edges of the incision were now united with thin silver-wire sutures, and the wound dressed with antiseptic precautions. The child was placed on a St. Andrew's cross, the upper arms of which were joined by a sheet of calico on which the body rested; the legs being securely bandaged with strips of adhesive plaster to the lower limbs of the cross. The pelvis and chest were also securely fixed to the apparatus. In this way the movements of the child were effectually controlled.

Two days after the operation, the scrotum was swollen, as if a portion of hernia had escaped from beneath the bandages; but this proved to be only a soft fluctuant swelling, probably an effusion of serum into the artificial tunica vaginalis, which had been formed by the folding down over the testicle of the lower half of the hernial sac, as described in the operation. In two days this swelling had disappeared, and the scrotum was in its natural state. On the fourth day after the operation, the wound was dressed. It was found almost united, except in the place where the wires were left hanging out. On the tenth day, the little clamp and wire were removed, and the parts were found quite matted together.

It is unnecessary to detail the further progress. The dressings were changed every two days, and at the end of four weeks cicatrization was practically complete. The child was then freed from restraint; but, for precaution, a bandage was still applied round the groin.

May 1st. At this date the radical cure of the hernia is perfect. No amount of exertion either of the limbs or on

crying has the slightest effect on the inguinal region of the abdominal walls.

The result has exceeded my expectations, and I shall not hesitate to practise the operation in all similar cases, and even to adopt it as a means of accomplishing a radical cure in cases of strangulated hernia in which an operation for the relief of strangulation has become necessary.

MODIFICATION.

Since the foregoing account was written I have operated on two cases, with an equally satisfactory result. The operations were both done on the 16th of May. One was on a boy, aged two years, with double hernia—that on the right side being large, and very troublesome. The other was on a boy aged thirteen months. In both cases unsuccessful attempts had been repeatedly made to retain the hernia by a truss.

The operation was done in exactly the same way as described above, only that, instead of silk threads and a silver wire being used, all the three sutures were of catgut prepared with chromic acid—which remains tough much longer than that prepared with carbolic acid. Of course, the ends of the ligatures were cut short.

Some cellulitis of the scrotum took place, followed by granulation and cicatrisation; but I am not sure that this is not an advantage; for the integuments in the groin are firmly matted to the subjacent tissues, and the inguinal canal is strengthened by this intimate adhesion of all the structures.

At this date, 20th June, the radical cure is perfect in all the cases.

